

SEGMENTATION AND DETECTION OF REPRESENTATIVE FRAMES IN  
VIDEO SEQUENCES

**ABSTRACT**

5 A method for organizing a sequence of video frames  
includes selecting one of the frames in the sequence as  
an initial frame in a first portion of a segment of the  
sequence and adding further frames in the sequence,  
subsequent the initial frame, to the first portion, while  
a measure of similarity of each of the added frames to  
10 the frames already in the first portion is within a first  
predefined bound. One of the added frames in the first  
portion is selected to be a representative frame for the  
segment. A second portion of the segment is generated by  
adding still further frames in the sequence, subsequent  
15 to the last frame in the first portion, to the second  
portion, while the measure of similarity of the added  
frame to the representative frame is within a second  
predefined bound. The first and second portions together  
are determined to constitute the segment that is  
20 represented by the representative frame.